## **Grove City College Status Sheet**

Status Sheets are provided as a convenience for the student and may be helpful for recording completed courses. However, the College Bulletin is the controlling authority on all requirements. Questions should be directed to your academic advisor or the Registrar.

(WI)=Writing Intensive, (SI)=Speaking Intensive, (IL)=Information Literacy courses.

## B.S. in Physics/Computer with Hardware Option Entering in 2024

(REVISED 04-12-2024)

ID#				Date:					
	r of Anticipated Graduation:  AL HOURS REQUIRED FOR THIS DEGREE			Advisor:					
	•		128 HOURS	Minimum CQPA and MQPA required for graduation					
General Educa	ation + Flective Requirements		41-42 HOURS	MQPA Courses					
				PHYSICS CORE REQUIREMENTS					
GENERAL EDI	UCATION REQUIREMENTS			PHISICSCO	RE REQUIREMENTS	Cr.	Sem. Taken	Grade	
HIIMANITIES	S CORF			PHYS 101	General Physics I - Engineering	4	Jeili. Takeli	Graue	
HUMA 102		_		PHYS 102	General Physics II - Engineering	4		· <del></del>	
HUMA 200	( )	3		PHYS 135	Horizons in Physics	1			
HUMA 202		3		PHYS 234	Modern Physics	3			
HUMA 301		3		PHYS 242	Introduction to Theoretical Physics	3			
HUMA 303				PHYS 288	Intermediate Laboratory (WI)	2			
	•		ırse	PHYS 303	Mechanics I	3			
The your	iong coquence of the Errana Errana	y cascatate for the coc		PHYS 321	Radiation Laboratory (SI/IL)	2			
WRITING RE	QUIREMENT		3 HOURS	PHYS 442	Computational Methods in Physics	3	-		
WRIT 101				ASTR 207	Introduction to Stars, Galaxies, & Cosmol				
				COMP 141	Computer Programming I	3	-		
STUDIES IN	SCIENCE, FAITH, & TECHNOLOGY (S	SFT)	2 HOURS	ELEE 441	Computer Architecture	3			
				COMP 244	Database Management Systems	3			
				COMP 342	Data Communication and Networking	3			
PHIL 243								-	
SSFT 210									
SSFT 212	· ·	5		TECHNICAL E	ELECTIVES			6-7 HOURS	
	3,7,5,5,5				of the following:				
-				PHYS 304	I Mechanics II, PHYS 305 Electricity and Mag	gnetism; F	PHYS 340 Therm	nodynamics	
FOUNDATIONS OF THE SOCIAL SCIENCES 3 HOURS			and Statistical Mechanics, PHYS 401 or 402 (Medical Physics), PHYS 421 Advanced Topics,						
Choose one of	course from the following:				Quantum Mechanics, ASTR 310 Astrophysi				
ECON 120	Foundations of Economics	PSYC 101 Found. o	f Psychology	Mathemati	ics for Computer Science.				
HIST 120	Foundations of History				•				
HIST 141	·			<del>-</del>					
HIST 204			•••	-					
POLS 101	Foundations of Political Science	SOCW 101 Found.	of Social Work						
		3		COMPUTER H	HARDWARE REQUIREMENTS			20 HOURS	
				COMP 220	Computer Programming II	3			
QUANTITATI	VE/LOGICAL REASONING		0 HOURS	ELEE 201	Linear Circuits I	3			
College requir	rements met through major-related cour	sework.		ELEE 202	Linear Circuits II	3			
	• ,			ELEE 204	Digital Logic	3		-	
NATURAL SO	CIENCES (with labs)		0 HOURS	ELEE 251	Lab Skills and Prototyping (IL)	1			
College requirements met through major-related coursework.				ELEE 252	Digital Circuits Laboratory	1			
	• ,			ELEE 306	Design of Digital Systems.	3		-	
PHYSICAL E	DUCATION		1 HOURS	ELEE 310	Microcontrollers	3			
PHYE 100	Healthful Living	1							
	-	-							
GENERAL ELECTIVES			17-18 HOURS	TECHNICAL (	CORE REQUIREMENTS (Science, Math, et	c.)		20 HOURS	
				CHEM 105	Chemistry for Engineers	4			
				MATH 161	Calculus I	4			
				MATH 162	Calculus II	4	-		
				MATH 261	Calculus III	4	-		
				MATH 262	Differential Equations	3			
				MATH 263	Numerical Differential Equations	1			

## SAMPLE FOUR-YEAR PLAN for the BACHELOR OF SCIENCE IN PHYSICS/COMPUTER with HARDWARE OPTION

## Freshman Year

	Fres	hman Year							
<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>						
PHYS 101 General Physics I	4	PHYS 102 General Physics II	4						
PHYS 135 Horizons in Physics	1	COMP 220 Computer Programming II	3						
COMP 141 Computer Programming I	3	MATH 162 Calculus II	4						
MATH 161 Calculus I	4	WRIT 101 Foundations of Academic Discourse	3						
HUMA 102 Civ and the Biblical Revelation	<u>3</u>	PHYE 100 Healthful Living	<u>1</u>						
	15		15						
	Soph	omore Year							
<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>						
CHEM 105 Chemistry for Engineers	4	PHYS 288 Intermediate Laboratory	2						
MATH 261 Calculus III	4	PHYS 234 Modern Physics	3						
Foundations of Social Science Course	3	PHYS 242 Introduction to Theoretical Physics	3						
HUMA 200 Western Civilization	3	ASTR 207 Introduction to Stars, Galaxies, & Cosmology	3						
SSFT Course	<u>2</u>	HUMA 202 Civilization and Literature	3						
	16	Electives*	<u>3</u>						
			17						
	Junior Year								
<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>						
PHYS 303 Mechanics I	3	PHYS 442 Computational Methods in Physics**	3						
COMP 244 Database Management Systems	3	ELEE 202 Linear Circuits II	3						
ELEE 201 Linear Circuits I	3	ELEE 204 Digital Logic	. 3						
ELEE 251 Lab Skills and Prototyping	1	ELEE 252 Digital Circuits Laboratory	1						
HUMA 301 Civilization and the Arts	3	ELEE 441 Computer Architecture	3						
Electives*	<u>3</u>	HUMA 303 Christianity and Civilization	<u>3</u>						
	16		16						
Senior Year									
<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>						
COMP 342 Data Communication and Networking	3	PHYS 321 Radiation Laboratory	2						
Electives*	<u>14</u>	ELEE 306 Design of Digital Systems	3						
	17	ELEE 310 Microcontrollers	3						
		MATH 262 Differential Equations	3						
		MATH 263 Numerical Differential Equations	1						
		Electives*	<u>4</u>						
			16						

 $<sup>^{\</sup>star}\,$  6-7 of these electives must be fulfilled by a Technical Elective course.

<sup>\*\*</sup> The sequencing of MATH 262/263 and PHYS 442 may alternate because PHYS 442 is taught every other year.